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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,811	07/24/2001	Ulrich Hetzer	P01,0236	6272

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EXAMINER
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LIANG, LEONARD S

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



H.A

<b>Office Action Summary</b>	<b>Application No.</b> 09/911,811	<b>Applicant(s)</b> HETZER ET AL.	
	<b>Examiner</b> Leonard S. Liang	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |



## **DETAILED ACTION**

### ***Specification and Drawings***

The lengthy specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and drawings. Specifically, the applicant is required to match the reference numbers in the figures and the specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US Pat 4791435) in view of Kneezel et al (US Pat 5107276).

Smith et al discloses:

- {claim 1} An arrangement for determining data for a warm-up cycle of an ink jet printhead (figure 2A; abstract); an ink cartridge having an ink jet printhead and a drive unit connected to the ink jet printhead for heating, measuring a temperature of, and driving the ink jet printhead (abstract; column 1, line 35-column 2, line 12); a control unit connected to the drive unit for controlling the drive unit (figure 1, reference 4); a memory accessible by the control unit having a first memory



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area in which warm-up data are stored in re-writable fashion (figure 2A, reference Data Processing Section; inherently has RAM); a second memory area in which data representing at least two predetermined conditions are stored, the at least two predetermined conditions being selected from the group consisting of temperature-related conditions, history-related conditions and user-related conditions (figure 2A, reference ROM Section; use profile serves as one predetermined condition and temperature serves as second predetermined condition)

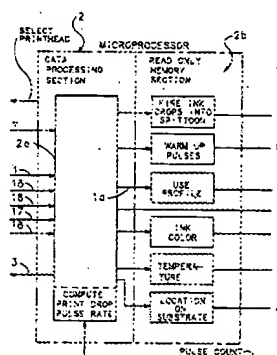


FIG 2A

- {claim 10} wherein the drive unit includes a sensor for measuring the temperature of the ink jet printhead, the sensor generating sensor data representing the temperature, and wherein the control unit is programmed to interrogate the sensor data via the drive unit for determining the warm-up data (abstract; column 1, line 35-column 2, line 12)
- {claim 11} a user interface connected to the control unit for entering a user request for the fast start and a communication link, connected to the control unit, to a remotely disposed telepostage data center which, upon receipt of the user



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request, transmits a parameter for the fast start, including an identification of the user, to the control unit, and wherein the control unit is programmed to store the parameter in the memory and to employ the user related conditions, corresponding to the user identified by the parameter, as one of the at least two conditions for determining the warm-up data for the fast start (figure 2A; column 1, line 35-column 2, line 37; column 4, lines 16-31)

Smith et al differs from the claimed invention in that it does not disclose:

- {claim 1} a sensor connected to the drive unit for measurement of ambient temperature; and the control unit being programmed to implement at least one measurement of the ambient temperature with the sensor, and to determine warm-up data for a fast start, executed in less than 30 seconds, for a current warm-up cycle dependent upon the ambient temperature and dependent on the at least one predetermined condition

Kneezel et al discloses:

- {claim 1} a sensor connected to the drive unit for measurement of ambient temperature (figure 5A, reference 55; column 8, lines 6-11); the control unit being programmed to implement at least one measurement of the ambient temperature with the sensor, and to determine warm-up data for a fast start, executed in less than 30 seconds, for a current warm-up cycle dependent upon the ambient temperature and dependent on the at least one predetermined condition (column 8, lines 1-30; column 12, lines 15-31)



It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Kneezel et al into the invention of Smith et al. The motivation for the skilled artisan in doing so is to gain the benefit of maintaining the printhead at a substantially constant temperature.

Claims 2-4, 6-8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US Pat 4791435) in view of Kneezel et al (US Pat 5107276), as applied to claim 1 above, and further in view of Bullock et al (US Pat 5812156).

Smith et al discloses:

- {claim 2} said memory is a first memory (figure 2A)

Smith et al, as modified, differs from the claimed invention in that it does not disclose:

- {claim 2} a second memory disposed on the ink cartridge, in which identification data uniquely identifying the ink cartridge, and data representing further predetermined conditions, are stored, and wherein the warm-up data stored in the first memory are allocated to the identification data
- {claim 3} wherein the ink cartridge has a serial number uniquely associated therewith, and wherein the identification data includes the serial number
- {claim 4} wherein the ink cartridge has a manufacture identification number uniquely associated therewith, and wherein the identification data includes the manufacture identification number
- {claim 6} wherein the memory is disposed on the ink cartridge and wherein the second memory area additionally contains identification data uniquely



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identifying the ink cartridge and data representing further predetermined conditions allocated to the identification data, and wherein the control unit is programmed to interrogate the memory to determine the warm-up data employing the further predetermined conditions allocated to the identification data

- {claim 7} wherein the ink cartridge has a serial number uniquely associated therewith, and wherein the identification data includes the serial number
- {claim 8} wherein the ink cartridge has a manufacture identification number uniquely associated therewith, and wherein the identification data includes the manufacturer identification number
- {claim 12} a date clock module connected to the control unit by generating history-related data as the history-related conditions

Bullock et al discloses

- {claim 2} a second memory disposed on the ink cartridge, in which identification data uniquely identifying the ink cartridge, and data representing further predetermined conditions, are stored (figure 1B, reference 28; column 4, lines 14-50)
- {claim 3} wherein the ink cartridge has a serial number uniquely associated therewith, and wherein the identification data includes the serial number (column 4, line 41)



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- {claim 4} wherein the ink cartridge has a manufacture identification number uniquely associated therewith, and wherein the identification data includes the manufacture identification number (column 4, line 25)
- {claim 6} wherein the memory is disposed on the ink cartridge and wherein the second memory area additionally contains identification data uniquely identifying the ink cartridge and data representing further predetermined conditions allocated to the identification data (figure 1B, 4, reference 28)
- {claim 7} wherein the ink cartridge has a serial number uniquely associated therewith, and wherein the identification data includes the serial number (column 4, line 41)
- {claim 8} wherein the ink cartridge has a manufacture identification number uniquely associated therewith, and wherein the identification data includes the manufacturer identification number (column 4, line 25)
- {claim 12} a date clock module connected to the control unit by generating history-related data as the history-related conditions (column 4, lines 36-38, 49, 57; column 5, lines 2-4; manufacture day/year and usage time naturally suggests date clock module)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Bullock et al into the invention of modified Smith et al. The motivation for the skilled artisan in doing so is to gain the benefit of controlling values, which enable the printer to maintain high quality print media output. The combination naturally suggests the warm-up data stored in the first memory is allocated to the identification data and



the control unit is programmed to interrogate the memory to determine the warm-up data employing the further predetermined conditions allocated to the identification data.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US Pat 4791435) in view of Kneezel et al (US Pat 5107276) and Bullock et al (US Pat 5812156), as applied to claims 2-4, 6-8, and 12 above, and further in view of Berson (US Pat 5513563).

Smith et al, as modified, discloses:

- {claims 5 and 9} wherein the ink cartridge has a serial number and a manufacturer identification number uniquely associated therewith (as taught in Bullock et al column 4, lines 25, 41)

Smith et al, as modified, differs from the claimed invention in that it does not disclose:

- {claims 5 and 9} wherein the control unit comprises a security module for forming a code word by encryption of the serial number and the manufacturer identification number, and wherein the control unit stores the code word in the second memory as at least a portion of the identification data

Berson discloses:

- {claims 5 and 9} encrypting serial number (column 3, lines 18-22)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Berson into the invention of modified Bullock et al so that serial numbers could be encrypted. The motivation for the skilled artisan in doing so is to gain the benefit of providing verifiable security (column 1, lines 46-47). The



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combination naturally suggests encrypting manufacture identification numbers and the control unit storing the code word in the second memory as at least a portion of the identification data.

***Response to Arguments***

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**Stephen D. Meier**  
Primary Examiner